AMENDMENTS TO THE SPECIFICATION

In paragraphs 5, 6, 7, 15, and 16, please amend as reflected in the following marked-up version of the paragraph:

[005] A common splitter design is shown in Figure 1~~A~~. Splitter 100 includes input ports and output ports. As shown in Figure 1~~A~~, these ports are represented by pigtail leads. Pigtail 102 represents the transmission line of a communications transceiver. Pigtail 104 represents the receive line of the communications transceiver. Pigtail 106 is a fiber optic cable to the communications network. Commonly, a transceiver sends optical signals through the transmission pigtail 102. The optical signal travels to a splitter plate 108, which splits the optical signal in two directions. In one example, approximately half of the optical signal is sent towards the decimation path 112a. The remaining portion of the optical signal is propagated into the pigtail 106. Data being received by the splitter 100 travels through the pigtail 106 into the splitter 100. The splitter plate 108 reflects half of the light to the decimation path 112a and half of the light to the reflector 110. The reflector 110 reflects all of the light towards the reception pigtail 104. Any light reflected to the decimation path 112a is wasted. A 3 dB decimation represents approximately a half power drop at the splitter plate 108. Examining Figure 1~~A~~, it can be seen that that at least 3 dB, or about 50 % of the initial power, is lost using the splitter method of bi-directional communication at each terminal. For a transceiver pair, the total loss of using this splitter is approximately 6 dB.

[006] Another method of bi-directional communication along a single fiber optic cable involves the use of optical circulators. An optical circulator, ~~as illustrated in Figure 1B,~~ is generally a device having three or more ports, by which an optical signal input into one port is output at the next port in either a clockwise or a counterclockwise direction. For example, an optical signal

input at port A of optical circulator ~~120~~ exits at port B. An optical signal input at port B exits at port C. In a three-port device, an optical signal input at port C exits at port A. The drawback of using currently available circulators for this type of communication is that currently available circulators are expensive to implement.

[007] The ~~third~~ second conventional method of bi-directional communication along a single fiber-optic cable involves the use of lasers with different wavelengths. Commonly a 1550 nanometer distributed feedback (DFB) laser is used to propagate an optical signal in one direction and a 1310 nanometer vertical cavity surface emitting laser (VCSEL) is used to propagate the optical signal in the opposite direction. One drawback with this configuration is that it requires two types of transceivers that are complementary, with different transceivers being used at the two communications devices that are engaging in the bi-directional communication. For example, one of the two communications devices must have a transceiver with a 1550 nanometer transmitter and a 1310 nanometer transmitter. In contrast, the other of the two communications devices must have a complementary transceiver having a 1310 nanometer transmitter and a 1550 nanometer receiver. Requiring two types of transceivers increases production and maintenance costs. It would therefore be beneficial to create a device in which all transceivers could be the same. A second drawback of this type of approach to bi-directional communication is that the 1550 nanometer DFB laser is very expensive as compared to the 1310 nanometer VCSEL. Therefore it would be beneficial to use only the cheaper 1310 nanometer VCSEL.

[015] Figure 1~~A~~ is a schematic representation of a splitter commonly used in bi-directional communication.

[016] ~~Figure 1B is a schematic representation of an optical circulator.~~